

In the Claims

For the convenience of the Examiner, all pending claims of the present Application are shown below whether or not an amendment has been made.

1. **(Currently amended)** A method of fabricating a semiconductor device including a crystallized active layer comprising the steps of:

providing a substrate;

depositing an amorphous silicon layer on said substrate;

~~heating said substrate while~~ depositing a metal layer ~~to induce~~ for inducing low temperature crystallization of amorphous silicon on at least a portion of said amorphous silicon layer by sputtering while heating said substrate to a temperature that allows at least a portion of the deposited metal to react with the amorphous silicon to form an oxidation-stable metal silicide film; ~~the metal layer comprising an element selected from the group consisting of nickel, palladium, tin, silver, gold, aluminum, copper, cobalt, chromium, ruthenium, rhodium, cadmium, platinum, and antimony;~~ and

conducting a thermal treatment of said substrate so that said amorphous silicon layer is crystallized by metal induced lateral crystallization (MILC) propagating from the portion covered by said metal layer.

2. **(Previously canceled).**

3. **(Original)** The method according to Claim 1, wherein the substrate is heated at a temperature in a range of 200-700°C.

4. **(Original)** The method according to Claim 1, wherein said metal layer is deposited using at least one of sputtering, heating evaporation, PECVD and CVD.

5. **(Original)** The method according to Claim 1, wherein the substrate is heated by using a heat conduction or a heat radiation method.

6. **(Original)** The method according to Claim 1, wherein a portion of said metal layer contacting with said amorphous silicon layer forms a metal silicide.

7. **(Original)** The method according to Claim 6, wherein other portions of said metal layer remain in the state of metal and further comprising a step of removing the remaining metal layer by etching.

8. **(Previously amended)** The method according to Claim 1, wherein at least a portion of said amorphous silicon layer is crystallized by metal induced lateral crystallization during the process of heating the substrate while depositing the metal layer.

9. **(Previously canceled).**

10. **(Original)** The method according to Claim 1, wherein the step of heating the substrate while depositing the metal layer comprises the steps of:

forming an insulation layer on said substrate and said amorphous silicon layer;
removing a portion of said insulation layer to expose a portion of said amorphous silicon layer; and
depositing said metal layer on the exposed surface of said amorphous silicon layer while heating said substrate.

11-15. **(Previously canceled).**

16. **(New)** The method of Claim 1 wherein the metal layer is nickel.

17. **(New)** The method of Claim 1 wherein the metal layer is palladium.